

DDI-0332/83

12 January 1983

MEMORANDUM FOR: Associate Deputy Director for Intelligence  
THROUGH: Director, Office of East Asian Analysis  
FROM: [REDACTED] Chief, Systems Development Staff, OEA  
SUBJECT: Request to Submit Manuscript for Publication

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1. I request permission to submit for publication the attached text titled [REDACTED]

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2. When approved, I intend to submit the manuscript for publication in Tongji (Statistics), an organ of the Chinese State Statistical Bureau.

3. None of the material in the manuscript is classified as it is a comment on an article (a translation of which is attached) that appeared in issue No. 5, 1982. The comment, which is an exercise in elementary index number theory, picks up on a point made in the last paragraph of the article.

4. I will submit the manuscript to the State Statistical Bureau [REDACTED] and the Economic Counselor at the Embassy in Beijing.

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5. I am not under cover. I am known as an Agency employee to the State Statistical Bureau [REDACTED]

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Attachment:  
Copy of text  
Form 879

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11-007-83

SUBJECT: Request to Submit Manuscript for Publication

I have reviewed the attached text, to the best of my knowledge have found it to be unclassified, and approve it for publication

  
Director of East Asian Analysis

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Date

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APPROVED:

  
Associate Deputy Director for Intelligence

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Date

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In the last 30 years, constant prices for industrial products have been compiled for 1952, 1957, 1970 and 1980. An article on 1980 constant prices for industrial products by the Industry, Transport, and Material Statistics Division of the State Statistical Bureau (Tongji, No. 5, 1982) gives the method of converting data in earlier constant prices to 1980 constant prices. According to the article, the 1952 gross value of industrial output (GVIO) is converted from 1952 constant prices to 1980 constant prices as follows:

$$\begin{aligned}
 & 1952 \text{ GVIO in 1952 constant prices} \\
 & \times \frac{1957 \text{ GVIO in 1957 constant prices}}{1957 \text{ GVIO in 1952 constant prices}} \\
 & \times \frac{1971 \text{ GVIO in 1970 constant prices}}{1971 \text{ GVIO in 1957 constant prices}} \\
 & \times \frac{1981 \text{ GVIO in 1980 constant prices}}{1981 \text{ GVIO in 1970 constant prices}} \\
 & = 1952 \text{ GVIO in 1980 constant prices}
 \end{aligned}$$

The article then makes the point that conversion coefficients should be used for individual branches of industry to avoid the effect of change in the structure of industry.

To make clear the impact of the change in structure on the final result, I have converted the 1952 GVIO from 1952 constant prices to 1980 constant prices at three levels of disaggregation--(I) the total GVIO, (II) the GVIO of light and heavy industry, and (III) the GVIO of individual branches of industry (see the Table). The results are as follows:

|                                 | <u>1952 GVIO<br/>in 1980<br/>constant prices</u> | <u>1980<br/>price<br/>index</u> | <u>1980<br/>GVIO<br/>index</u> |
|---------------------------------|--|---------------------------------|--------------------------------|
| I. By total GVIO                | 263.8  | 76.8                            | 1,885.3                        |
| II. By light and heavy GVIO     | 272.8  | 79.5                            | 1,822.6                        |
| III. By branch of industry GVIO | 339.1  | 98.8                            | 1,446.3                        |

Deflating by the different methods gives widely differing price and output indexes. Highly aggregated indexes, such as for total GVIO, tend to cancel price changes in major components of industry. The use of more disaggregated data on industrial prices and output yields an index of GVIO that explicitly reflects the observed movement of industrial activity. As a general rule, the more disaggregated the data, the more closely the results reflect the actual change in prices and growth of output.

China: 1952 Gross Value of Industrial Output  
in 1952 and 1980 Prices

|                    | Million<br>1952<br>yuan | 1980<br>price<br>index | Million<br>1980<br>yuan |
|--------------------|-------------------------|------------------------|-------------------------|
| I. Total           | 34,330                  | 76.8                   | 26,380                  |
| II. Total          | 34,330                  | ---                    | 27,280                  |
| Light industry     | 22,110                  | 84.0                   | 18,580                  |
| Heavy industry     | 12,220                  | 71.2                   | 8,700                   |
| III. Total         | 34,330                  | ---                    | 33,910                  |
| Metallurgy         | 2,020                   | 88.7                   | 1,790                   |
| Electric power     | 430                     | 107.9                  | 460                     |
| Coal               | 830                     | 184.5                  | 1,530                   |
| Petroleum          | 180                     | 107.3                  | 190                     |
| Chemicals          | 1,660                   | 37.7                   | 630                     |
| Machinery          | 3,900                   | 53.2                   | 2,070                   |
| Building materials | 1,030                   | 89.4                   | 920                     |
| Timber             | 2,230                   | 137.1                  | 3,060                   |
| Food               | 8,280                   | 126.5                  | 10,480                  |
| Textiles           | 9,430                   | 98.7                   | 9,310                   |
| Paper              | 760                     | 98.0                   | 740                     |
| Other              | 3,580                   | 76.2                   | 2,730                   |

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OEA/SDS/ [redacted] (12 Jan 82)

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